

New Concepts of Matter, Life and Mind

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by Ervin Laszlo

Author, Founder of Systems Philosophy

In light of the current, revolutionary advances in the natural sciences and in the study of consciousness, the concepts of matter, life, and mind have under-gone major changes. This paper outlines some basic aspects of these changes, taking in turn the emerging concept of matter, of life, and of human mind and consciousness.

The concept of matter

The Western common sense view has held that there are only two kinds of things that truly exist in the world: matter and space. Matter occupies space and moves about in it and it is the primary reality. Space is a backdrop or container. Without furnished by material bodies, it does not enjoy reality in itself. This common sense concept goes back to the Greek materialists; it was the mainstay also of Newton's physics. It has been radically revised in Einstein's relativistic universe (where spacetime became an integrated four-dimensional manifold), and also in Bohr's and Heisenberg's quantum world. Now it may have to be rethought again.

Advances in the new sciences suggest a further modification of this assumption about the nature of reality. In light of what scientists are beginning to glimpse regarding the nature of the quantum vacuum, the energy sea that underlies all of spacetime, it is no longer warranted to view matter as primary and space as secondary. It is to space or rather, to the cosmically extended 'Dirac-sea' of the vacuum that we should grant primary reality. The things we know as matter (and that scientists know as mass, with its associated properties of inertia and gravitation) appear as the consequence of interactions in the depth of this universal field. In the emerging concept there is no 'absolute matter,' only an absolute matter generating energy field.

The concept of life

The subtle relationship between the material things we meet with in our experience and the energy field that underlies them in the depth of the universe also transforms our view of life. Interactions with the quantum vacuum may not be limited to micro-particles: they may also involve macroscale entities, such as living systems. Life appears to be a manifestation of the constant if subtle interaction of the wave-packets classically known as 'matter' with the underlying vacuum field. These assumptions change our most fundamental notions of life. The living world is not the harsh domain of classical Darwinism, where each struggles against all, with every species, every organism and every gene competing for advantage against every other. Organisms are not skin-enclosed selfish entities, and competition is never unfettered. Life evolves, as does the universe itself, in a 'sacred dance' with an underlying field. This makes living beings into elements in a vast network of intimate relations that embraces the entire biosphere itself an interconnected element within the wider connections that reach into the cosmos.

The concept of mind

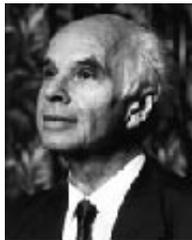
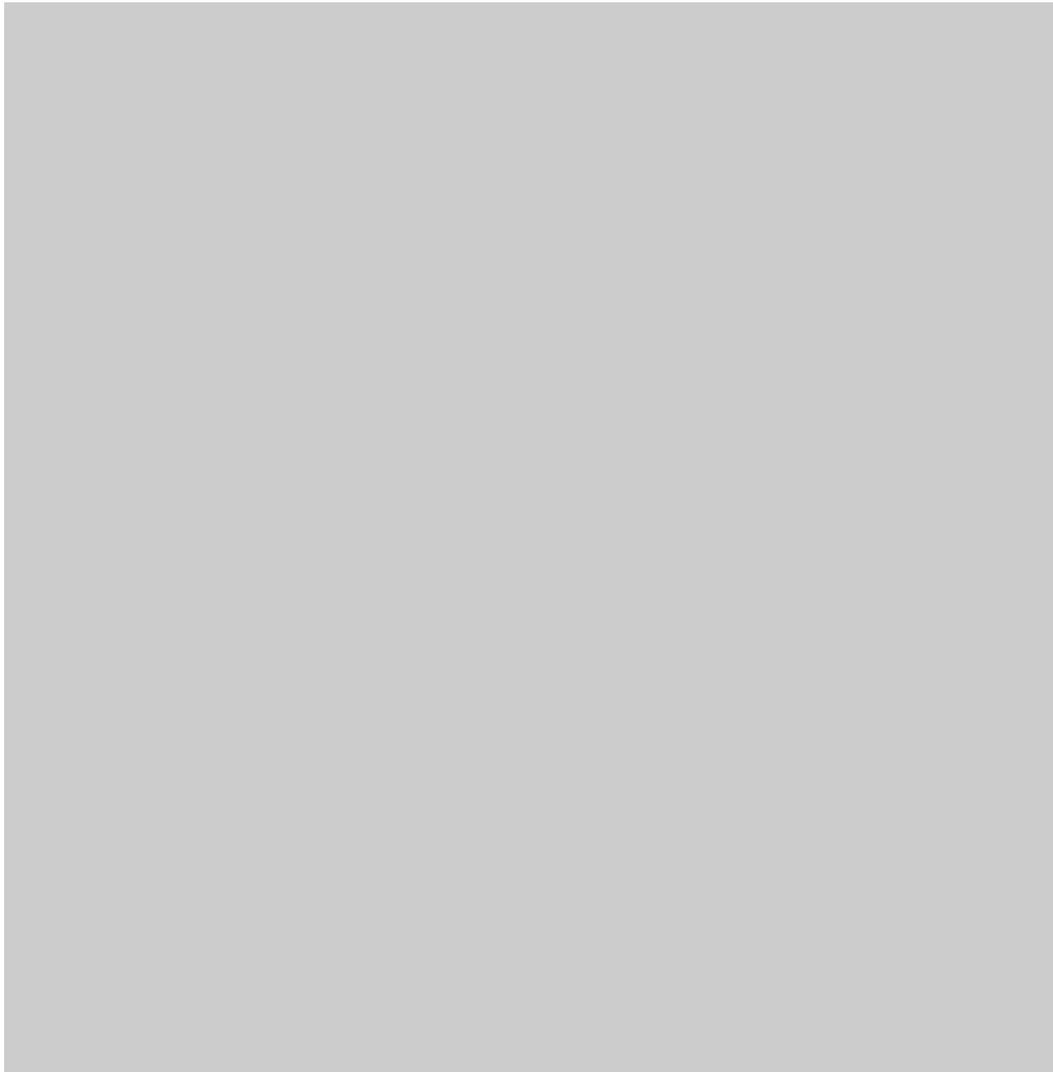
In the on going co-evolution of matter with the vacuum's zero-point field, life emerges out of nonlife, and mind and consciousness emerge out of the higher domains of life. This evolutionary concept does not 'reduce' reality either to non-living matter (as materialism), or assimilate it to a nonmaterial mind (as idealism). Both are real but (unlike in dualism), neither is the original element in reality. Matter as well as mind evolved out of a common cosmic womb: the energy-field of the quantum vacuum. The interaction of our mind and consciousness with the quantum vacuum links us with other minds around us, as well as with the biosphere of the planet. It 'opens' our mind to society, nature, and the universe. This openness has been known to mystics and sensitives, prophets and meta-physicians through the ages. But it has been denied by modern scientists and by those who took modern science to be the only way of comprehending reality. Now, however, the recognition of openness is returning to the natural sciences. Traffic between our consciousness and the rest of the world may be constant and flowing in both directions. Everything that goes on in our mind could leave its wave traces in the quantum vacuum, and everything could be received by those who know how to 'tune in' to the subtle patterns that propagate there. This assumption is borne out by the empirical findings of psychiatrists such as Stanislav Grof. They confirm the insight of Vaclav Havel: it is as if something like an antenna were picking up signals from a transmitter that contains the experience of the entire human race.

Societal implications

That people in all parts of the world search for a deeper awareness of their own subconscious mind may not be accidental: at this critical juncture of our sociocultural evolution it may be part of the survival dynamics of the human species. A greater awareness that all that goes on in our mind is accessible to others, and that all that goes on in the mind of others is accessible to us, would prompt us to develop greater empathy and solidarity with each other. Such felt relations are vital not only for our personal growth and development; in our interdependent and crisis-prone world, they are vital also for our collective survival and development.

Ervin Laszlo

Author's Biography



Ervin Laszlo is the author or editor of 69 books translated into as many as 19 languages, and has over four hundred articles and research papers and six volumes of piano recordings to his credit. He serves as Editor of the monthly *World Futures: The Journal of General Evolution* and of its associated *General Evolution Studies* book series.

Laszlo is generally recognized as the founder of systems philosophy and general evolution theory, serving as Founder-Director of the General Evolution Research Group and as Past President of the International Society for the Systems Sciences. He is the recipient of the highest degree in philosophy and human sciences of the Sorbonne, the University of Paris, as well as of the coveted Artist Diploma of the Franz Liszt Academy of Budapest. His numerous prizes and awards include four Honorary Doctorates.

Ervin Laszlo's unusual career spans music, philosophy, science, futures studies, and world affairs. Born in Budapest, Hungary in 1932, his talent for music was discovered at the age of five. At seven he was admitted to the Franz Liszt Academy under the wing of famed composer-conductor Ernst von Dohnanyi. His debut with the Budapest Philharmonic at the age of nine established him as one of the great child prodigies of the time. Following a hiatus of barely a year due to the siege of Budapest at the end of World War II, Laszlo embarked on an international music career highlighted by the Grand Prize of the International Music Competition

of Geneva in 1947, and a New York recital debut a few months later. Just fifteen, he was hailed by New York's critics as an artist who has few peers among pianists of any age. With major write-ups in LIFE, Time, Newsweek, and other national and international media, Laszlo settled in New York and travelled from there to tour the five continents.

In his late teens Laszlo's childhood interest, fostered by his philosopher uncle in Budapest, in questions about meaning in nature and life and destiny in society resurfaced. It prompted him to undertake systematic readings on these fields and to follow courses and seminars in New York's Columbia University and New School for Social Research. His copious notes accompanied him on his concert tours and in 1961 were the subject of a casual dinner conversation following a recital in The Hague. His dinner partner, who showed keen interest in his ideas, took the notes and reappeared the following morning with an offer to publish them - he turned out to be the philosophy editor of the famed Dutch publishing house Martinus Nijhoff. The publication of these notes two years later marked a turning point in Laszlo's career. He was asked to join the University of Fribourg's Institute of East European Studies, and two books and numerous research papers later received an invitation to spend a year at the Philosophy Department at Yale University. Laszlo's professional involvement in science and philosophy followed a consistent if highly personal path. His main interest centered on the perennial 'great questions' of science and philosophy, in particular the origins of the cosmos, the nature and direction of the evolution of life and of consciousness, and the meaning of the changes and transformations we are witnessing today in culture and civilization. His initial 1963 book *Essential Society: An Ontological Reconstruction* was inspired by the metaphysics of Whitehead and was followed by *Beyond Scepticism and Realism*, a methodological treatise, and *Individualism, Collectivism and Political Power*, an analysis of the ideological divide in the postwar world. *La Metaphysique de Whitehead*, an application of Whitehead's 'organic philosophy' to human society, served as Laszlo's thesis at the Sorbonne for the Doctorat d'Etat es-Lettres et Sciences Humaines, completing his formal credentials in the academic world.

While at Yale Laszlo read von Bertalanffy's *General System Theory*, met von Bertalanffy, and began to elaborate *Introduction to Systems Philosophy*, the seminal work with which his name became thereafter associated. Appointments at various US Universities, including the State University of New York, led to a visiting semester at Princeton's Center of International Studies. His seminar at the Woodrow Wilson School on the systems approach to world order engaged the attention of Club of Rome founder Aurelio Peccei, who enlisted Laszlo to complement the economic and physical 'outer limits' emphasis of the Club's first Report, *The Limits to Growth*, with a human and cultural 'inner limits' orientation. Laszlo's research resulted in 1977 in the publication of the voluminous *Goals for Mankind*, the third global report to The Club of Rome, as well as of the personal treatise, *The Inner Limits of Mankind*. To research these works the Executive Director of the United Nations Institute for Training and Research (UNITAR) invited Laszlo as Special Fellow; an appointment that was followed by his being placed in charge of the Institute's work on the New International Economic Order. As Programme Director Laszlo spent seven years at UN headquarters in New York, producing fifteen volumes on the New International Economic Order and another six volumes on Regional and Interregional Cooperation.

Having completed these assignments in the mid-80s, Laszlo decided to take a sabbatical period before returning to his university. He moved to his converted medieval farmhouse in Tuscany in search of the peace and freedom to analyze his experience in the academic world and at the United Nations. He returned to his quest of researching answers to the great questions of evolution in our time. His *Evolution: The Grand Synthesis* was published in 1987

and was soon translated into Italian, German, Spanish, French, Chinese, and Portuguese. It was followed by the application of his evolutionary insights to contemporary society: *The Age of Bifurcation*. Inspiring considerable debate and discussion, it appeared in Russian and Turkish in addition to all of the previous languages.

Laszlo's reading and research at his Tuscan farmhouse was soon punctuated by frequent visits to the US, Japan, China, and many parts of Europe, as the United Nations University, the newly formed European Culture Impact Research Consortium, and then Federico Mayor, the Director-General of Unesco, sought his advice and collaboration. These activities culminated in 1993, when Laszlo, one of the two plenary speakers at the Third World Congress of the World Federation of Hungarians (the other being nuclear scientist Edward Teller), proposed that Hungary, neither a major economic nor a military power but a significant force in the field of science, art, and culture, should be the host to an international 'Artist's and Writer's Club' to complement the Club of Rome's insistence on economic and political measures with emphasis on the urgency of new thinking, better values, and a deeper sense of personal and professional responsibility. The Hungarian government responded with the offer to set up the secretariat of the worldwide organization that was to become known as The Club of Budapest.

Since the middle of the 1990s Laszlo has been dividing his time and energies between fundamental research in the new sciences - resulting in a series of books (*The Creative Cosmos*, 1993, *The Interconnected Universe*, 1995, and *The Whispering Pond*, 1996)-and building up the worldwide organization and activities of the Club. He produced the first Report to the Club in 1997: *Third Millennium: The Challenge and the Vision*. The definitive enlarged and updated version of this Report is *MACROSHIFT: Navigating the Transformation to a Sustainable Civilization*, slated for publication in September, 2001. For his activities in connection with the goals of the Club of Budapest-focusing world attention on the need to evolve our consciousness and adopt a more up-to-date ethics as a precondition of reaching a peaceful and sustainable world-Laszlo was awarded the Goi Peace Prize of Japan (October 2001) and is slated to receive his fourth Honorary Doctorate (November 2001).

In addition to designing and overseeing the global projects of The Club of Budapest, including the annual awarding of the Planetary Consciousness Prizes and the celebration of the World Day of Planetary Consciousness (on March 20) and the World Day of Planetary Ethics (on September 22), Laszlo is currently completing two major science books, *Coherence in Cosmos and Consciousness*, and the more popularly oriented *Holos: The Fabulous World of the New Sciences*.



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